

CLAIMS

The embodiments of an invention in which an exclusive property or right is claimed are defined as follows:

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1. A vertical cavity surface emitting laser, comprising:
- a substrate;
 - an active region adjacent said substrate;
 - a first mirror between said active region and said substrate; and
 - a second mirror adjacent said active region, said active region being between said second mirror and said first mirror;
- wherein said second mirror includes an oxide insulating region; and
- wherein said oxide insulating region, said active region, and at least a portion of said second mirror include damage from implanted ions.
2. The vertical cavity surface emitting laser of claim 1, wherein said oxide insulating region and said damage from said implanted ions define a high resistance region that substantially confines current flow through an inner portion of said high resistance region.
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3. The vertical cavity surface emitting laser of claim ~~2~~¹, wherein said high resistance region is shaped as an annular ring.
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